REQUEST FOR PROPOSAL
Addendum # 1

King County
Department Of Executive Services
Finance and Business Operations Division
Procurement and Contract Services Section
206-684-1681 TTY RELAY: 711

ADDENDUM DATE: November 12, 2004

RFP Title: **TRANSIT RADIO SYSTEM**

RFP Number: **04-003PR**

Due Date/Time: **December 23rd - 2:00 P.M.**

Buyer: Paul Russell, *paul.russell@metrokc.gov* , 206-684-1054

Q#	Subsection	QUESTION	ANSWER
Part A, SECTION A			
1.	Part A, Attachment A, Introduction, Item 4		**DELETE:** The County reserves the right to conduct a cost/price analysis and evaluation of the Proposal and/or an audit of the Contractor in order to determine if the prices are reasonable and in accordance with the terms of the Contract. The Proposer shall provide such cost and price information as the County may request, including but not limited to providing the Cost Breakdown ~~attached hereto as Part A Attachment ___~~ within forty-eight (48) hours of the County's request. **REPLACE WITH:** The County reserves the right to conduct a cost/price analysis and evaluation of the Proposal and/or an audit of the Contractor in order to determine if the prices are reasonable and in accordance with the terms of the Contract. The Proposer shall provide such cost and price information as the County may request, including but not limited to providing the Cost Breakdown within forty-eight (48) hours of the County's request.
Part C, SECTION 1 Introduction			
2.	Section 1.3.C. Structure of Scope of Work	The RFP states that the Proposer will provide TRS pricing for the Baseline as well as alternatives. If the proposer wishes to propose an alternative solution that meets coverage requirements but does not include the exact 14	**CLARIFICATION:** No. Provide a single solution for the Baseline TRS. The Baseline requirement is ninety-five percent (95%) mobile coverage. Pricing should reflect Proposer's proposed solution to meet baseline ninety-five percent (95%) mobile coverage.

This Invitation to Bid Addendum will be provided in alternative formats such as Braille, large print, audiocassette or computer disk for individuals with disabilities upon request.

Q#	Subsection	QUESTION	ANSWER
		sites outlined in the conceptual design in Table 1-1, is pricing still required for the conceptual 14-site design as a baseline?	Note: In the RFP phrase "as well as alternatives to" refers to the list of potential additions, deductions and alternate tunnel radio designs.
3.	Section 1.5.2.1.B. ACCESS Mobile Voice and Data Systems–Addition A	The RFP indicates that ACCESS unit coverage extends beyond King County into Pierce, Snohomish, and Washington counties. Is this extended coverage area included <u>within</u> the overall Metro Service Area operations boundary illustrated in Appendix A?	**CLARIFICATION:** Yes. Both fixed route and ACCESS coverage is illustrated as Metro Service Area in Appendix A, Metro Service Area, which is the required coverage area, is defined within the green boundary. Radio coverage for ACCESS is generally required within King County. Note: there is no county called "Washington". **DELETE**: **Section 1.5.2.1.B.** The TRS will provide radio coverage for ACCESS vehicles throughout King County~~, and extending into Pierce County and Snohomish County, Washington~~. ACCESS has approximately 300 vehicles. **REPLACE WITH**: **Section 1.5.2.1.B.** The TRS will provide radio coverage for ACCESS vehicles throughout King County. ACCESS has approximately 300 vehicles.
Part C, SECTION 3 Baseline Land Mobile Radio System			
4.	Section 3.2.1.3.A. Radio Interference Studies	The price for providing a fix to an interference problem can only be determined post award after the proposed equipment is installed. It is recommended that the following passage be removed "…and provide the proper equipment to protect the site from interference. The associated price for this protection shall be part of the proposal price."	**CLARIFICATION:** KCM is not removing this requirement. KCM believes that it is reasonable for Proposers to conduct an intermodulation study for each site in their proposed design using the frequencies provided in Table 3-1 for the TRS, and for other frequencies licensed at the same location, based on the FCC database. The Proposers interference mitigation shall be included as part of the proposal price.
5.	Section 3.3. Conceptual System Design	Since the Region 43 700 MHz Regional Planning Document has yet to be submitted and approved by the FCC, and since the 9 frequencies identify-ied in Table 3-1 have prelimin-ary approval by Region 43, and since there are no approved	**CLARIFICATION:** The Region 43 700 MHz Plan has adopted the CAPRAD pre-packed frequency plan, which complies with both National Coordination Committee guidelines and FCC regulations. The TRS design must comply with FCC Part 90 for 700 MHz band. For the Conceptual Design, Macro Corporation used ERPd of 50.97dBmW

Q#	Subsection	QUESTION	ANSWER
		Region 43 700 MHz Design Guidelines to follow with respect to site ERP limits and adjacent and co-channel interference contours, and since the 14 site Conceptual Design must have followed some guidelines with respect to ERP levels in order to arrive at 95% mobile coverage, please identify to all proposers the design guidelines and/or assumptions and/or ERP levels to use at each of the 14 Conceptual Design sites.	and frequency 764MHz for all sites. Macro also used the site coordinates, site elevation and transmit antenna height above ground level information listed in the Appendix F, Master Site List.
6.	Section 3.3.1. Repeater Sites and Channel Capacity	The paragraph indicates that 13 system-wide voice paths are planned, but the Table 3-2 outlines 9, 11, or 13 voice paths at various sites. This appears to be a discrepancy. Neverthe-less, with only 9 frequencies to be licensed, there doesn't appear to be enough frequencies available to provide the number of voice paths required for a simulcast or TDMA solution. Please clarify.	**CLARIFICATION:** Table 3-1 lists the nine 700 MHz frequencies that Metro has received preliminary approval for the TRS from Region 43 Planning Committee. These are 25 KHz frequencies. Current FCC regulations on 700 MHz allows each voice path to occupy 12.5 KHz of bandwidth or less. So, at a minimum, the nine frequencies can provide 18 voice paths.
7.	Section 3.4.1.B. System Design	Are proposers required to provide a baseline design using the exact 14-sites conceptual design outlined in the Table 1-1 for coverage, traffic throughput, and price comparison purposes?	**CLARIFICATION:** The Baseline system requirement is ninety-five percent (95%) mobile coverage. As long as the Proposer's baseline system can achieve ninety-five percent (95%) mobile coverage it does not have to use all 14 sites listed in the conceptual design. Per the RFP the Proposer may choose other sites, from the list supplied in the RFP, but if sites other than the 14 main sites are part of your Proposal, the County may modify your price based on site costs associated whit those sites. **DELETE:** **Section 3.4.1.B** Proposers are required to submit, as a baseline system, a proposal based on the ninety-five percent (95%) mobile coverage ~~conceptual~~ design described in the Specification. **REPLACE WITH:** **Section 3.4.1.B** Proposers are required to submit, as a baseline

Q#	Subsection	QUESTION	ANSWER
			system, a proposal based on the ninety-five percent (95%) mobile coverage design described in this Specification.)
8.	Section 3.3.1.1.C. Channel Distribution Assumptions	We would like to perform traffic analysis for various design alternatives and confirm the traffic capacity for the conceptual design. The traffic analysis tool that will be used will compute the performance of the network under voice and/or data load. For data applications, could King County provide bytes per user, the length per call, and type of call for any data application that may be required for the 700 MHz trunking network?	**CLARIFICATION:** Radio traffic data provided in *Attachment 1* is a 30-day traffic log for the current radio system. Radio channels 1, 2, 3 & 4 are bus voice channels. Radio channels 5 & 6 are bus data channels, which are in continuous use. Radio channels 7 & 8 are Operations supervisory channels. Radio channels M1 & M2 are maintenance channels.
9.	Section 3.4.2.C.2. System Performance Requirements	Section 3.4.2.C.2 states that 59% portable coverage is required. However section 11.4.5.6.J.2.c specifies a 65% portable coverage acceptance test requirement. Since acceptance testing should agree with coverage goals, please clarify what portable outdoor coverage is required.	**CLARIFICATION:** The TRS outdoor portable coverage requirement is fifty-nine percent (59%). **DELETE:** **Section 11.4.5.6.J.2.c** In order to pass the portable coverage test, at least ~~sixty-five percent (65%)~~ of the test locations must provide a Delivered Audio Quality (DAQ) rating of 3.4 or better for voice communications. **REPLACE WITH:** **Section 11.4.5.6.J.2.c** In order to pass the portable coverage test, at least **fifty-nine percent (59%)** of the test locations must provide a Delivered Audio Quality (DAQ) rating of 3.4 or better for voice communications.
10.	Section 3.4.2.C.3. System Performance Requirements	The coverage percentage is based on the talkout (base-to-mobile) signal to a vehicle-mounted mobile radio with a 3 dB gain antenna. Section 4.7 specifies a 0 dB gain antenna for revenue vehicles, and 3 dB gain antenna for non-revenue vehicles. This would imply that the non-revenue vehicles are the more important scenario to be used in the coverage analysis. If this is true, should	**CLARIFICATION:** The coverage requirement is for all mobile units including revenue vehicles and non-revenue vehicles. Proposers should use the worst-case scenario for mobile coverage design.

Q#	Subsection	QUESTION	ANSWER
		we assume standard passenger cars with a 3 dB gain roof-mounted antenna mounted at a 5-foot height? Or should we assume revenue vehicles (such as buses) using a 0 dB gain roof-mounted antenna mounted at a 10-foot height for coverage analysis?	
11.	Section 3.4.3.6. The OBS/CCS Interface	Since details of the VLU-Mobile Radio interface are not known at this time and won't be defined until after contract award in conjunction with the OBS/CCS contractor, assumptions regarding this interface may need to be made in order to design the TRS for the proposal. Is this the approach that KCM is expecting from TRS bidders? If not, does KCM have a recom-mended approach that TRS bidders should use to deal with the lack of definition of the VLU-Mobile Radio interface?	**CLARIFICATION:** Yes, it is correct that Metro expects that the TRS Contractor will coordinate with the OBS/CCS Contractor for the VLU/mobile radio interface design. It will be necessary for TRS Proposers to make some assumptions regarding this interface, until more specific information is available from a selected OBS/CCS contractor. The clearest Proposals will list interface assumptions as part of the RFP response.
12.	Section 3.4.3.6. The OBS/CCS Interface	Does the phrase "possible interface functionality" in the last sentence from Section 3.4.3.6 imply that the list in the subse-quent section (3.4.3.6.1) are recommendations and not requirements of the Mobile Radio-OBS Interface?	**CLARIFICATION:** The Technical Interface Committee (TIC) will determine final interface requirements. The list in Section 3.4.3.6.1 is the basic functionality that has been identified as system requirements.
Part C, SECTION 9 Baseline Digital Loop Microwave System Requirements			
13.	Section 9.2. Existing System	It is clearly stated in this section that no part of the existing Metro microwave system will be used. However, what about the existing LAN system? Can the existing Metro LAN/WAN infrastructure be used in conjunction with the new 700MHz Transit Radio System?	**CLARIFICATION:** The current radio system does not use the King County WAN (KCWAN). The KCWAN or King County Fiber Network (I-Net) may be proposed for the TRS; however, there are installation and monthly recurring costs associated with both of these networks that need to be included in the total proposed price. The proposal evaluation team reserves the right to identify and apply a cost differential, beyond that identified in Proposals, for using either of these wired networks.
14.	Section 9.7.3.B.	In this paragraph and in other	**CLARIFICATION:**

Q#	Subsection	QUESTION	ANSWER
	Microwave Path Design	sections, the need for a "SONET, 30 MHz, 155 Mb/s (3 DS3) capacity, loop microwave system" with a reliability requirement of "99.9999% at BER=10-3" is specified. These parameters can probably be provided by a non-standby loop microwave system of the type previously quoted. Section 9.8.7.A requires "hot-standby radios". This seems somewhat contradictory. Is the requirement for a hot-standby loop system, or for a loop system of whatever kind (hot-standby or non-standby) that meets the technical requirements stated in this paragraph?	A loop microwave system that meets 99.9999% at BER 10^{-3} reliability will satisfy the Section 9.8.7.A, Protection and Recovery requirement. **DELETE:** **Section 9.8.7.A, Protection and Recovery** Hot-standby shall be provided for all major radio components. **REPLACE WITH:** **Section 9.8.7.A, Protection and Recovery** The system shall be configured to provide loop protection.
15.	Section 9.8.4. Unfaded Bit Error Rate	An unfaded BER measurement of 10^{-13} is certainly measurable, but it would take 75 days per hop or per DS1 circuit to complete the measurement to the 10^{-13} level. That's a long time to assume that fading will not play a factor in the measurement and it also increases testing costs considerably. Would a BER test to 10^{-11} rate, which can be performed during an 18 hour period, make more sense?	**CLARIFICATION:** The requirement for this sub-section has been revised as follows: **DELETE:** **Section 9.8.4, Unfaded Bit Error Rate** In the absence of fading, the BER will not be greater than $10^{-\cancel{13}}$. **REPLACE WITH:** **Section 9.8.4, Unfaded Bit Error Rate** In the absence of fading, the BER will not be greater than 10^{-12}**. This objective, short-term test shall be performed on each path in the system at a DS1 level.**
16.	Section 9.8.10.1. Transmitter Output Power	A minimum transmitter power output of +25.5 DBm is specified. However, FCC EIRP rules govern the amount of power to be transmitted. For short hops, the EIRP levels may be exceeded using a +25.5 dBm transmitter power output. The EIRP can be reduced by using attenuators on the path, however a lower transmitter power outputs provide a cleaner solution. Would it make more sense to restate this	**CLARIFICATION:** The requirement for this sub-section has been revised as follows: **DELETE:** **Section 9.8.10.1, Transmitter Output Power** The minimum transmitter output power referenced to the antenna port ~~is +25.5 dBm~~. **REPLACE WITH:** **Section 9.8.10.1, Transmitter Output Power** The minimum transmitter output power referenced to the antenna port **shall be as defined on the manufactures equipment specifications as it**

Q#	Subsection	QUESTION	ANSWER
		requirement to avoid the use of attenuators to comply with FCC rules?	**pertains to the selected terminal utilized for the design of the path/system**.
Part C, SECTION 11 Baseline Installation and Testing			
17.	11.4.5.7.A.2. Voice System Coverage Test	The requirement for failure of more than one-half of the test measurements in any compact two square mile or larger area within the defined service area could very likely require more sites and therefore a higher price to guarantee coverage, especially for the 59% portable coverage requirement. It is very likely that the 41% of non-covered area will include 2 square mile area. It is recommended that this requirement be removed.	**CLARIFICATION:** Test grid size has been revised to 0.25 mile square. **DELETE:** **Section 11.4.5.7.A.1, Voice System Coverage Test Failure** Failure to score at least DAQ 3.4 in ninety-five percent (95%) or more of the points tested (both in the service area and within the specific location). **REPLACE WITH:** **Section 11.4.5.7.A.1, Voice System Coverage Test Failure** Failure to score at least DAQ 3.4 in ninety-five percent (95%) or more **for mobile coverage and fifty-nine percent (59%) or more for portable coverage** of the points tested (both in the service area and within the specific location). **DELETE:** **Section 11.4.5.7.A.2**, **Voice System Coverage Test Failure** Failure of more than ~~one-half~~ of the test measurements ~~in any compact two square mile or larger area within the defined~~ service area. **REPLACE WITH:** **Section 11.4.5.7.A.2**, **Voice System Coverage Test Failure** Failure of more than **5.0%** of the test measurements **for mobile coverage based upon 0.25-mile square grids within the** service area.
Part C, GENERAL			
18.		Will the County accept a communications solution that employs separate mobile radios for voice communications and data communications.	**CLARIFICATION:** A two-radio solution is acceptable as long as it meets electrical and physical space requirements.
Part C, APPENDICES			
19.	Appendix A. Metro Service Area	The King County Metro Service Area map shows 3 smaller boundaries outlined in green located inside the overall	**CLARIFICATION:** For calculating the ninety-five percent (95%) mobile coverage requirement, the two southern-

Q#	Subsection	QUESTION	ANSWER
		located inside the overall service boundary. Are these areas to be excluded from coverage analysis (exclusion zones)?	most green outlined areas and northern-most route extension into Snohomish County can be excluded.
20.	Appendix F. Master Site List		**CLARIFICATION:** There are two Federal Way sites on the Master Site List, "Federal Way #1" and "Federal Way." "Federal Way #1" was incorrectly listed as Site # 8. The change to Appendix F reflects the correct Site # 8, Federal Way. **DELETE:** Appendix F, Master Site List **REPLACE WITH:** *Attachment 2*, Appendix F (Revised), Master Site List:
21.	Appendix G. Subscriber Matrix	A total of 2871 subscriber units are forecasted for the next 9 years over two phases. The initial phase (through year 2007) totals 2598 mobile, portable, and control station units combined, with the remainder for phase 2 and spares. Please clarify what set of quantities should be used on price sheets for pricing the base bid.	**CLARIFICATION:** For the RFP response, Proposers should use Phase I figures including spares.

ATTACHMENT 1: Radio traffic data.

Channel 1

http://www.metrokc.gov/finance/procurement/rfpdocs/2004/October/GoodsAndServices/04-003/Attach_1_CH1.xls

Channel 2

http://www.metrokc.gov/finance/procurement/rfpdocs/2004/October/GoodsAndServices/04-003/Attach_1_CH2.xls

Channel 3

http://www.metrokc.gov/finance/procurement/rfpdocs/2004/October/GoodsAndServices/04-003/Attach_1_CH3.xls

Channels 4-5

http://www.metrokc.gov/finance/procurement/rfpdocs/2004/October/GoodsAndServices/04-003/Attach_1_CH4-5.xls

Channel 7

http://www.metrokc.gov/finance/procurement/rfpdocs/2004/October/GoodsAndServices/04-003/Attach_1_CH7.xls

Channels 8-9

http://www.metrokc.gov/finance/procurement/rfpdocs/2004/October/GoodsAndServices/04-003/Attach_1_CH8-9.xls

Channels Other

http://www.metrokc.gov/finance/procurement/rfpdocs/2004/October/GoodsAndServices/04-003/Attach_1_CH-Other.xls

Attachment 2

APPENDIX F - MASTER SITE LIST (Revised - Addendum 1)

CONFIDENTIAL - NOT FOR PUBLIC DISCLOSURE

CONCEPTUAL SYSTEM DESIGN SITE #	SITE CODE	SITE NAME	LATITUDE (NAD 83)	LONGITUDE (NAD 83)	GROUND ELEV (FEET)	GROUND ELEV (Meters)	Actual Antenna Structure (feet)	Available Space for RF Antennas (feet)	Available Space for MW Antennas (feet)	Support Struct. Height (meters)	Support Struct. Height (feet)	HEIGHT ABOVE AVERAGE TERRAIN (meters)	Max. ERP (watts) Per FCC	HEIGHT ABOVE AVERAGE TERRAIN (meters)*	Max. ERP (watts) Per FCC	ERP (dBmW)	Antenna AGL (meters)	Antenna AGL (feet)
						3.2808						Various Ant Hts.	Various Ant Hts.	30 m Ant Hts	30 m Ant Hts			
		KING COUNTY/VALLEY COM SITES																
	KCV01	Cambridge	47-21-49.4	122-17-25.4	446	135.9				55	180	123	1000	98	1000	60.00	55	180
	KCV03	Federal Way #1	47-16-42.4	122-17-28.4	429	130.8	SS-250	160-200	160-200	55	180	110	1000	85	1000	60.00	55	180
Site 2	KCV04	Rattlesnake	47-28-09.4	121-49-17.4	3228	983.9				55	180	697	200	672	200	53.01	55	180
Site 3	KCV05	Ring Hill	47-45-12.4	122-02-01.4	558	170.1	Guy-300	140-below (see MW)	160-300-limited	55	180	127	1000	102	1000	60.00	55	180
Site 4	KCV06	Skyway	47-29-18.4	122-14-28.4	464	141.4	MP-90	60	60	55	180	127	1000	102	1000	60.00	55	180
Site 5	KCV07	Squak	47-30-15.4	122-02-50.4	2015	614.2	SS-160 (heavily loaded)	100	100	55	180	478	350	453	600	57.78	55	180
	KCV08	View Park	47-28-49.4	122-32-02.5	410	125.0	300-Guy-All levels	300-Guy-All levels	300-Guy-All levels	55	180	135	1000	110	1000	60.00	55	180
	KCV09	King County Courthouse	47-36-08.4	122-19-48.5	82	25.0				15	49	3	1000	18	1000	60.00		
	KCV10	McDonald	47-20-11.4	121-51-30.4	3288	1002.2				55	180	568	350	543	350	55.44	55	180
	KCV11	Grass	47-12-14.4	121-47-42.4	4280	1304.6				55	180	694	200	669	200	53.01	55	180
	KCV12	Snoqualmie Pass (Dodge Ridge)	47-25-13.4	121-25-39.3	3761	1146.4				55	180	56	1000	31	1000	60.00	55	180
	KCV13	Sobieski	47-40-52.4	121-19-42.4	4402	1341.7				55	180	396	600	371	600	57.78	55	180
	KCV14	Regional Justice Center	47-23-12.5	122-14-15.4	36	11.0				15	49	-57	1000	-42	1000	60.00		
	KCV15	Gold Mt.	47-32-54.3	122-47-11.5	1758	535.8	SS-160	140-160	140-160	55	180	495	350	470	350	55.44	55	180
	KCV17	Tiger Mt. Location 1	47-30-16.3	121-58-20.4	2998	913.8	SS-140 (limited space)	100-120	100-120	55	180	772	140	747	140	51.46	55	180
		Tiger Mt. Location 2					SS-90	50-70	50-70									
	KCV18	High Point Metro RCVR 1 Site	47-32-22.4	122-22-39.4	504	153.6	MP-140	No Space	100-120	55	180	-1	1000	-26	1000	60.00	55	180
Site 7	KCV19	Roosevelt - Metro RCVR 2 Site	47-41-29.4	122-19-04.5	446	135.94245	MP-	90	90	55	180	143	1000	118	1000	60	55	180

						3													
Site 8	KCV20	Federal Way Metro RCVR 3 Site	47-19-46.08	122-15-56.14	521	158.8	H2OTank-80	80	80	55	180	144	1000	119	1000	60.00	55	180
		SNOHOMISH COUNTY SITES																
Site 1	SC01	Mountlake Terrace	47-47-53	122-18-45.0	507	142.8	180	TX 140 / RX 180	95	55	180	158	1000	133	1000	60.00	55	180
Site 10	SC02	Nike	47-47-36.0	122-14-20.0	495	152.0	180	TX 140 / RX 160	120	55	180	128	1000	103	1000	60.00	55	180
		SEATTLE SITES																
	SEA01	West Seattle	47-32-25.4	122-22-40.5	485	147.8				55	180	172	1000	147	1000	60.00	55	180
	SEA02	Columbia Center (KCV16)	47-36-18.4	122-19-49.5	173	52.7	941	941	941	15	50	308	600	308	600	57.78		
	SEA03	Northeast	47-41-29.4	122-19-04.5	446	135.9				55	180	143	1000	118	1000	60.00	55	180
Site 12	SEA04	Capitol Hill (EPS02)	47-36-56.4	122-18-31.5	412	125.579127	SS-350	260	260	55	180	143	1000	118	1000	60	55	180
	SEA05	Apple Cove	47-48-25.3	122-29-39.5	352	107.3	SS140	(70-80) (120-130)	(70-80) (120-130)	55	180	133	1000	108	1000	60.00	55	180
	SEA06	Metro Tunnel North (West Lake)	47-36-41.4	122-20-12.5	118	36.0	No structure			30	100	28	1000	28	1000	60.00		
	SEA07	Metro Tunnel South (Pioneer)	47-36-09.4	122-19-52.5	77	23.5	No structure			30	100	17	1000	17	1000	60.00		
Site 6	SEA08	Top Hat	47-30-13	122-20-13	461	140	SS-170	100-170	100-170	55	180	154	1000	99	1000	60	55	180
Site 13	SEA09	Queen Anne High School	47-37-56.0	122-21-12.0	391	139.3	75	75	75									
		EPSCA SITES																
Site 9	EPS01	Horizon	47-33-17.4	122-07-55.4	1154	351.743477	SS-60	20-40	20-40	55	180	292	1000	267	1000	60	55	180
	EPS02	West Tiger	47-30-16.4	121-58-21.4	2869	874.5				55	180	702	200	677	200	53.01	55	180
	EPS04	Capitol Hill	47-36-56.4	122-18-31.5	412	125.6		180	180	55	180	143	1000	118	1000	60.00	55	180
	EPS05	North Seattle	47-45-35.4	122-18-42.5	492	150.0	H2OTank-90	90	90	55	180	139	1000	114	1000	60.00	55	180
Site 11	EPS06	Education Hill	47-41-33.4	122-06-49.4	404	123.140697	H2OTank-72	Top -20-40	Top -20-40	55	180	92	1000	67	1000	60	55	180
	EPS07	Crossroads	47 37 00.0	122 47 31.9			H2OTank-80	80	80									
		NEW SITES																
Site 14	NEW02	Maury Island	47-22-45.9	122-24-53.6	460	140	MP-35	35	35									
		DISPATCH CENTERS																
		Central/Atlantic Base - Metro Transit	47-35-32-52	122-19-33.49	30	9.1	Building-30	30	30									
		Exchange Building - ACCESS	47-36-	122-20-	73	22.3	Building-	120	120									

		14.43	02.98			120												
	METRO TRANSIT BACKUP DISPATCH CENTER																	
	North Base	47-44-48.4	122-19-54.5	372	113.4	No structure	Available Space for Twr.	55	180	123	1000	98	1000	60.00	55	180		
	REMOTE DISPATCH																	
	East Base																	
	South Base																	
	Central Atlantic Base	47-35-32-52	122-19-33.49	30	9.1													
	International Station																	
	Power Control																	